



Abstract

A metal detector (1) used for identifying contaminants in products. The detector (1) includes an oscillator coil (10) that may be formed as two series wound coils (34, 35) having relatively smaller dimensions or as two parallel wound coils (29, 30) having relatively larger dimensions. A pair of input coils (13, 14) is located adjacent to the oscillator coil (10). A first signal (8) is generated by the first input coil (13) in response to the presence of a metallic object, while a second signal (24) is generated by the second input coil (14) in response to the presence of a metallic object. By measuring the ratio of the first signal (8) to the second signal (24) the physical location of a metal object within the metal detector cavity (7) can be determined.